



NOAA Ship NANCY FOSTER

ELECTRONICS

Dry Oceanographic Lab

- Dimensions: 17' X 16', 272 sq ft
- 200kHz single beam transducer with Abyss echo sounder for shallow water surveying
- 150kHz (Ocean Surveyor) Acoustic Doppler Current Profiler (ADCP): uses Doppler effect to measure speed and current
- 12kHz single beam transducer with Abyss echo sounder for deep water surveying
- Multibeam transducer: Kongsburg-Simrad EM 1002 for chart grade survey data
- Applanix POS M/V for positioning
- SeaBird SBE 45: real time surface sound speed which interfaces with multibeam
- SeaBird 19: Archivable CTD for water column sound speed profiling
- SeaBird 19: Real time CTD sound speed Profiling
- SeaBird 911: mounted to Niskin bottles for real-time sound speed profiling and water sampling
- SCS: Scientific Computer System

Wet Oceanographic Lab

- Dimensions: 26' X 16', 416 sq ft
- Uncontaminated Seawater System: draws water from under bow, uses SeaBird 45, 38 and Fluorometer
- Software: Hypack for navigating line plans, Velocwin for sound speed conversion, Caris for MB data processing
- SeaBird SBE 38: sea surface temperature

Bridge

- Navigation
 - 200kHz and 50kHz single beam transducer with Furuno FE-700 echo sounder
 - Transas ES2 for ECDIS (electronic chart display integration system), software Navi-Sailor 2400
 - Transas ES2 for transiting, operations, and video feed from lab
 - RADAR: Furuno S-band and X-band with ARPA
 - Dynamic Positioning Displays: forward and aft console
 - Furuno Universal AIS (automatic identification system) FA-100
 - Gyrocompass: 2 Meridian Surveyors and 9 repeaters

- NAVTEX: transmits weather and safety information
- Young Wind Tracker
- SCS digital reader
- MACS (machine control system): 2
- GMDSS suite: hooked with weather fax to receive distress signals and marine safety information
- Close caption TV
- SACS (steering and control system): 2 on each forward, aft, port, and starboard consoles

Communication

- INMARSAT-B and C
- HF SSB/DSC Transceiver
- Cellular telephone
- Land lines in port
- Iridium
- VHF radios
- Hand-held radios for ship to launch and deck communications